HARDCORE, Extreme, Bootcamp, warrior, Spartan and a multitude of other words to stimulate our inner chest thumping primate!! What am I talking about you ask?! Well, I'm talking about the shift in training, from quick and easy, to well, the not so easy and not so quick in terms of what it takes to be in shape. Over the last few years the fitness industry has shed its delicate skin - we are getting away from light, easy workouts where you don't break a sweat, and have to come to realize that hard work and sweat is going to produce the results. Ring the bell, schools in, write this down: HARD WORK AND SWEAT is what it's going to take to produce the results we want!! Phewwww, that's out of the way, and now that we have accepted that fact we can look at the other side of hard work and sweat: RECOVERY. I applaud the change; don't get me wrong, I have been an advocate of good old fashioned hard work since I started in this industry over 15 years ago. We need to remember, however, that our bodies are very similar to machines, and like machines our bodies need regular maintenance. The harder we push our bodies the better we need to maintain them. In terms of our bodies, rest and proper recovery is how we stay on top and perform this maintenance. That way we ensure that our bodies stay performing at their best as well as helping to prevent injuries that can sideline us. There are many ways we can help our body recover - nutrition being a very important one. A lot of us are getting better educated on nutrition and proper diet. Think of nutrition as the fuel for the body, like putting gas in your car, truck or SUV or performing an oil change. As much as we are gaining more knowledge in terms of nutrition, hire or consult a registered dietitian or nutritionist, it will save you a lot of time wading through the 'knowledge' on the internet and TV. Sit down and discuss your training and goals. They will help construct a plan that suits your lifestyle and take into account your individual needs. What I want to teach you and talk about today are the often overlooked, physical ways in which we can aid our bodies in recovery. Think of these like taking your car in for a tune-up, rotating your tires or changing the spark plugs in your car or truck. These recovery techniques should be done on a daily basis, and can be done whether or not we have worked out or preformed some sort of physical activity that day.

First, let's talk about recovering from a workout, running, hockey game or some sort of physical exertion. In terms of recovery, post-workout recovery is second only to sleep in the recovery hierarchy. A post workout cooldown speeds up short-term as well as long-term recovery in comparison to not cooling down. Recovery is defined in this case as a return to the pre-work out state. Moving is preferable to static stretching post activity because it supports circulatory activity, and limb movement assists circulation so the heart doesn't have to do it all on its own. To cool down use a low-impact method like cycling, rowing, or walking. In order to flush the muscles properly, move easy for 4-5 minutes and then "sprint" for 5-10 seconds, repeat this easy effort/sprint method a total of three or four times totaling twenty minutes. This system of easy effort and sprinting helps remove the metabolic waste that is produced by physical activity.

Another great way to recovery is the addition of an easy cardio vascular activity several hours (3-4 minimum) after training. You want to take a 20-30 minute walk or light bike ride to boost circulation to create a demand for more glucose by the muscles. You can take your dog or kids out for a walk or spin on the bike at an easy pace. You don't want to get your heart rate too high. I recommend keeping your heart rate below 65% of your

maximum. Afterwards, eat a light snack. If it's later in the day and you're heading off to bed, the snack should be heavier in protein.

The Foam Roller is an essential self-massage tool and should be used daily. We use the foam roller to perform self myofascial release techniques or SMR techniques for short. Foam rolling is becoming more main stream, which is great because we can now find foam rollers at Sport Check, Wal-Mart, and most gyms have them now. When foam rolling, we are rolling muscle and fascia under pressure, which stretches, separates and reorganizes them. This can help improve flexibility, muscle soreness, relieve joint stress, improve performance, increase neuromuscular efficiency as well as aid in the prevention of injuries. You'll use your own body weight to massage away restrictions to normal soft tissue extensibility. You should roll through each part of the body and each side for three to five minutes. When you encounter a painful spot; stop rolling and rest on that area for 30-45 seconds. This will stimulate the GTO (Golgi Tendon Organs) thus reducing muscular tension, helping to regulate the facial receptors. Fascia is a form of connective tissue which wraps around our muscle fibers. It's a thin, tight sheath like a sausage wrapper. Bundles of these muscle fibers are then wrapped with a slightly thicker layer of fascia then the total muscle is wrapped again with another layer of fascia. Fascia can be damaged forming impingements. These impingements will not allow the muscles to slide or glide properly and can impair the proper movement of the underlying muscles. Fascia is like a cobweb that runs throughout our entire body, so when one part of the fascia is injured or compromised it can affect tissues away from the original site of the problem. Yes, it can be painful at first, but this pain is indicative of bound-up tissue or different muscles adhering to each other. When muscles are bound up or adhered to each other, it makes them inefficient. Another advantage to frequent use of the foam roller is that it increases the effectiveness of normal, deep tissue massage. The reason for this is that the practitioner won't waste time releasing knots and tension, but instead can work on deeper, structural issues. Areas to emphasize are the IT bands, quads, hamstrings, glutes and calves. Get in touch with a trainer and have them show you how to use the foam roller because like anything else, there is a right way and a wrong way, so make sure you are doing it the right way!!

These next two techniques are a little harder to perform as they can be uncomfortable, however I believe the benefits, both physically and mentally, make them essential to your everyday routine. The first technique or tool is the Recovery Shower or contrast shower. To perform a recovery shower, first, cook for 3-5 minutes under a hot shower, relax, and massage the muscles. This will cause the blood vessels to dilate causing blood to rush out to your skin and extremities. Then slowly turn off the hot water until it's unbearably cold. Deal with it, suck it up and remain under the cold water for a full five minutes. This cold will cause the blood vessels to constrict and the blood will flow inwards to your organs. Once well cooled, switch the hot water back on. Do this *slowly*, you're cold so don't pin the heat and burn yourself. The hot water will cause the blood vessels to dilate again and the inrushing blood will flush the muscles. Repeat for at least two cycles and finish with cold water unless you are working out at night. This should be done immediately following the workout or physical activity as this is the most effective time to perform the contrast shower. To highlight: 3-5 minutes hot, followed by five (full, no cheating) minutes of cold, repeat 3 times. I mentioned finishing with cold unless doing this at night as I have found that ending with the cold leaves us in a heightened state. If you're planning on going to bed within the hour you might find it difficult to fall asleep. There is no penalty for doing it more often than once a day, and you can do this on your days off as well. Try getting up in the morning and having a contrast shower, you'll be surprised at how energized you will feel

afterwards. The second recovery technique is an ice bath. Ice baths are a little harder to add to our routine for a couple of reasons: we either don't have access to an extremely cold stream or we don't have a whole bunch of ice. We can figure things out; either go for a hike into the mountains, which I have done with many clients, or go out and buy 6-7 bags of ice. Following an intense workout, race, or physical challenge during which the muscles have been overheated, there is no reason to cook them more in a hot tub or simple hot shower. If an ice cold stream (mountain streams are the best or worst depending on how you look at it) is not available, put 40-70lbs of ice in a bathtub or you can blow up a kiddle pool outside, add water to waist height and get in. Do this for 4-5 minutes and hop out, put a towel over yourself, then move around and stay active for 2-3 minutes. Repeat this cycle 3-4 times for maximum effectiveness. I usually use the Ice Bath option with clients and athletes after a hard workout that lasts more than an hour, or like mentioned above after a hot and hard race day or physical event. These last two options have many health benefits and improve circulation. Showering with cold water or jumping in an ice bath is going to improve your blood circulation between organs and skin considerably. With cold temperatures, blood flows to your organs for protection to keep them the warmest. Warm water then sends the blood rushing to the skin so alternating between cold and hot can be a great way of improving your blood circulation. Improved mood: I know it's hard to quantify mood. Your mood can be altered and affected by many things, but the cold showers and ice bath have been shown to stimulate noradrenalin secretion in the brain. This section of the brain is associated with improving disorders like depression. Remember growing up and our mothers telling us to stay out of the cold or we will end up sick? While despite that advice, spending time in the cold can actually increase our immune strength. There have been studies showing that people who take cold showers typically exhibit higher white blood cell counts as well as higher concentrations of plasma, T helper cells and lymphocytes. For the guys out there, contrast showers and ice baths have been shown to increase testosterone levels, not just during the bath or shower but throughout the rest of the day. Testosterone makes us feel more motivated, we have more 'jump' and it helps in terms of muscle recovery. There are metabolic advantages to cold showers; the cold induces an increase in our body's metabolism. The cold temperatures force your body to re-regulate the body's temperature, which causes us to burn calories. Cold helps us breath better. What?! Yes, I said it - cold can help us breathe better. Few people truly breathe deeply. Jumping under the cold, especially the first few times, the truth be told, I still hyperventilate when I have a contrast shower. It teaches us and can actually force us to take deep breaths.

Yoga!!! Yoga is not what a lot of people think of when they think of recovery. If you have been to a yoga class they can be quite challenging. All forms of recovery aren't easy, but the benefits of yoga are many. Like the contrast shower and ice bath, yoga adds both physical and mental aspects to the recovery process. In a recent study, yoga has been proven to help and decrease lower back pain as well as improve both function and mobility of the spine. The three year study performed at West Virginia University compared a group who did yoga twice a week (90 minute classes) with a group who received conventional medical therapy and found that the yoga group had less pain and more importantly less functional disability. Yoga, like anything new, can be intimidating at first, so research and find beginner's class; maybe take a friend to your first class, but make it happen. Yoga has many different poses that sometimes require instruction to be able to perform the moves properly to get the most out of it. Stick with it, the health and recovery benefits are incredible! Many of my athletes and clients, due to time restriction or scheduling problems, can't always make it to a class, so they have apps on their iPhone or iPads. Some have gone have gone out and bought a few DVDs, which allows them to add yoga into their routine when it's convenient.

You want to be a warrior? You want to be extreme? Well, the harder you work the better you need to recover!! You need to perform regular 'maintenance' on your body to make sure it can stand up to the rigors of hard training. You need to make sure that you don't damage or cause injury to the body. This body 'maintenance' is called recovery, and all you need is cold water, ice, a round piece of foam, stretch/yoga pants, and a little time. Recovery isn't a sometimes thing, if we don't maintain our body it will break down, we will get injured or sick, and we'll be taken out of the gym, which will make our fitness goals harder to achieve. By adding these simple and affective recovery techniques into your physical fitness regime, it will help you stay healthier and will keep your body 'in the fight', making sure that you are capable of taking on the hard work that is required to be and stay in top shape.

If you have any questions, please contact me at: drew@evolvednutrition.com and make sure to check out our new website: www.evolvedconditioning.com

"We are what we repeatedly do, excellence then is not an act but a habit" - Aristotle